

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/753,722	(	01/04/2001	Shingo Iwasaki	041514-5103	2640	
9629	7590	01/03/2005		EXAMINER		
		& BOCKIUS LLP		BAUMEISTER, BRADLEY W		
WASHING		IA AVENUE NW 20004		ART UNIT	PAPER NUMBER	
	<b>,</b>			2815		

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			Mo
	Application No.	Applicant(s)	
Advisory Action	09/753,722	IWASAKI ET AĻ.	
Advisory Addon	Examiner	Art Unit	
	B. William Baumeister	2815	•
The MAILING DATE of this communication a	ppears on the cover sheet with	the correspondence address	
THE REPLY FILED 26 October 2004 FAILS TO PLACE herefore, further action by the applicant is required to nal rejection under 37 CFR 1.113 may only be either condition for allowance; (2) a timely filed Notice of Application (RCE) in compliance with 37 CFR 1.114.	o avoid abandonment of this a (1) a timely filed amendment peal (with appeal fee); or (3) a	pplication. A proper reply to a which places the application	a in
PERIOD FOR	REPLY [check either a) or b)		
a) The period for reply expires <u>3</u> months from the mailing	date of the final rejection.		
b) The period for reply expires on: (1) the mailing date of the no event, however, will the statutory period for reply exp ONLY CHECK THIS BOX WHEN THE FIRST REPLY with 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). Bee have been filed is the date for purposes of determining the period ender 37 CFR 1.17(a) is calculated from: (1) the expiration date 2) as set forth in (b) above, if checked. Any reply received by the mely filed, may reduce any earned patent term adjustment. See 3	oire later than SIX MONTHS from the NAS FILED WITHIN TWO MONTHS.  The date on which the petition under od of extension and the correspondire of the shortened statutory period for Office later than three months after the	mailing date of the final rejection. OF THE FINAL REJECTION. See I 37 CFR 1.136(a) and the appropriat ag amount of the fee. The appropriat r reply originally set in the final Office	MPEP e extension te extension e action; or
I. A Notice of Appeal was filed on Appella 37 CFR 1.192(a), or any extension thereof (37 0)	nt's Brief must be filed within t		
2. The proposed amendment(s) will not be entered	• • • • • • • • • • • • • • • • • • • •		
(a) they raise new issues that would require fu	rther consideration and/or sea	arch (see NOTE below);	
(b) ☐ they raise the issue of new matter (see Not		,	
(c) they are not deemed to place the application issues for appeal; and/or	on in better form for appeal by	materially reducing or simplify	ying the
(d) they present additional claims without can NOTE:	celing a corresponding numbe	er of finally rejected claims.	
3. Applicant's reply has overcome the following re	jection(s):		
<ol> <li>Newly proposed or amended claim(s) wo canceling the non-allowable claim(s).</li> </ol>	uld be allowable if submitted i	n a separate, timely filed ame	ndment
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request application in condition for allowance because:			ce the
The affidavit or exhibit will NOT be considered to raised by the Examiner in the final rejection.	pecause it is not directed SOL	ELY to issues which were nev	wly
7. For purposes of Appeal, the proposed amendm explanation of how the new or amended claims			ın
The status of the claim(s) is (or will be) as follow	vs:		
Claim(s) allowed:			
Claim(s) objected to:			
Claim(s) rejected: <u>1-5,7,9-14,30-34,36,38-43 and</u>	<u>47-52</u> .		
Claim(s) withdrawn from consideration: 6,8,15-2			
B. The drawing correction filed on is a) a		d by the Examiner.	
Note the attached Information Disclosure Stater		40.0	$\wedge$
0. Other:	BRADLEY BAUMEIST PRIMARY EXAMINE	B. William Baumeister Primary Examiner Art Unit: 2815	

Art Unit: 2815

## **DETAILED ACTION**

## Response to Arguments

- 1. Applicant's arguments filed 12/10/04 have been fully considered but they are not persuasive.
  - a. Applicant argues that "terminating on" is distinguishable from "terminating overhanging." This is not persuasive because "terminating on" is broad enough to read on either (1) "terminating directly on;" or alternatively (2) "terminating over" (or "indirectly on in an overhanging relationship").
  - b. Applicant argues that of FIGs 4A-D, only the structure associated with FIG 4D is relevant to the claims, but that none of the other structures (e.g. FIGs 4A-C or the undepicted structure that would exist between the FIG 4C structure and the FIG. 4D structure, after removal of the mask62, but prior to the etch of the insulator 66) because FIG 4D is directed towards a final product while the other structures are intermediate products. The Examiner is not convinced that FIG 4D is a final structure. Many additional processing steps would have to be undertaken after this stage of processing in order for the structure to actually be capable as functioning as an electron emitting device. For example: an anode would have to be attached; the intervening space would have to be evacuated of air; control circuitry would have to be interconnected; a power source would have to connected; and the power would have to be turned on. In any event, the claims do not limit the structure to a completed structure, a final product, an intermediate product that is actually capable of emitting electrons without any further processing, or the like. As such, all of the other intermediate structures discussed

Art Unit: 2815

in the previous Office Action are also potentially relevant to the claims as presented.

- c. Regarding claim 51 e.g., Applicant argues that the entire recess of FIG 4D is not semi-spherical in shape. The examiner agrees. However, the island of the intermediate product that exists between the FIG 4C and 4D structures is, in fact, semi-spherical in shape.
- d. Accordingly, the rejections are still deemed to be proper and are therefore maintained.

## **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. William Baumeister whose telephone number is (571) 272-1722. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRADLEY BAUMEISTER PRIMARY EXAMINER

B. William Baumeister Primary Examiner Art Unit 2815